

What is claimed is:

1. A topical composition comprising:

5 a hybrid silicone powder matrix; and

an effective amount of a hydrophobic active ingredient  
and a volatile silicone entrapped within said hybrid  
silicone powder matrix.

10 2. The composition of claim 1, wherein the  
composition is a time/controlled release composition.

15 3. The composition of claim 1, wherein said hybrid  
silicone powder matrix comprises a hybrid silicone powder.

4. The composition of claim 3, wherein said hybrid  
silicone powder is silicone rubber powder particles coated  
with silicone resin powder.

20 5. The composition of claim 3, wherein said hybrid  
silicone powder is a crosspolymer selected from the group  
consisting of silicone, dimethicone, cyclomethicone, vinyl

dimethicone, organomodified silicone, organomodified  
dimethicone, and any combinations thereof.

6. The composition of claim 3, wherein said hybrid  
5 silicone powder is a vinyl dimethicone/methicone  
silsesquioxane crosspolymer.

7. The composition of claim 3, wherein said hybrid  
silicone powder is present in an amount about 0.1 wt% to  
10 about 99% of the total weight of the composition.

8. The composition of claim 3, wherein said hybrid  
silicone powder is present in an amount from about 5 wt% to  
about 80% of the total weight of the composition.

9. The composition of claim 1, wherein said volatile  
silicone is selected from the group consisting of linear  
and cyclic silicones having 3 to 8 silicone molecules.

10. The composition of claim 9, wherein said volatile  
silicone is a cyclomethicone.

11. The composition of claim 1, wherein said  
hydrophobic active ingredient is selected from the group

consisting of an insect repellent, sunscreen, retinol, retinoic acid, retinyl palmitate, oil soluble retinol derivative, ascorbyl palmitate, oil soluble ascorbic acid derivative, salicylic acid, derivative of salicylic acid, fragrance, phytol, essential oil, perilla oil, tamarind oil, and any combinations thereof.

12. The composition of claim 1, wherein said hydrophobic active ingredient is present in an amount about 0.01 wt% to about 90% of the total weight of the composition.

13. The composition of claim 1, wherein said hydrophobic active ingredient is present in an amount about 0.05 wt% to about 60 wt% of the total weight of the composition.

14. The composition of claim 1, wherein said hydrophobic active ingredient is present in an amount about 0.05 wt% to about 45 wt% of the total weight of the composition

15. The composition of claim 1, wherein said hybrid

silicone powder matrix is present in an amount about 0.1 wt% to about 99 wt% of the total weight of the composition.

16. The composition of claim 1, wherein said hybrid  
5 silicone powder matrix is present in an amount about 10 wt% to about 50 wt% of the total weight of the composition.

17. The composition of claim 1, wherein said volatile  
silicone is present in an amount about 1 wt% to about 99  
10 wt% of the total weight of the composition.

18. The composition of claim 1, wherein said volatile  
silicone is present in an amount about 5 wt% to about 80  
15 wt% of the total weight of the composition.

19. The composition of claim 1, wherein said  
hydrophobic active ingredient is one or more insect  
repellent actives selected from the group consisting of oil  
of citronella, N,N diethyl-m-toluamide, ethyl  
20 butylacetylaminopropionate, hydroxy-ethyl isobutyl  
piperidine carboxylate, dimethyl phthalate, 2-ethyl-1,3  
hexanediol, neem oil, soybean oil, lemon grass oil,  
geranium/geraniol oil, p-methane-3,8-diol, and any  
combinations thereof.

20. The composition of claim 1, further comprising a cosmetically acceptable vehicle.

5 21. The composition of claim 1, wherein the composition is in a product form selected from the group of an aerosol spray, cream, emulsion, solid, liquid, dispersion, foam, gel, lotion, mousse, ointment, powder, patch, pomade, solution, pump spray, stick, and towelette.

10 22. A method for repelling insects from skin comprising topically applying to skin the composition of claim 1.

15 23. An insect repellent composition comprising:

a hybrid silicone powder matrix having a hybrid silicone crosspolymer powder selected from the group of dimethicone, cyclomethicone, vinyl dimethicone, organomodified variations thereof, and any combinations thereof; and

an effective amount of an insect repellent entrapped in said hybrid silicone powder matrix, wherein said insect

repellent is one or more actives selected from the group consisting of oil of citronella, N,N diethyl-m-toluamide, ethyl butylacetylaminopropionate, hydroxy-ethyl isobutyl piperidine carboxylate, dimethyl phthalate, 2-ethyl-1,3 hexanediol, neem oil, soybean oil, lemon grass oil, geranium/geraniol oil, p-methane-3,8-diol, and any combinations thereof.

24. The composition of claim 23, wherein the composition is a time/controlled release composition.

25. A method for the production of a topical composition comprising:

mixing a hybrid silicone powder with at least one liquid hydrophobic ingredient for a period of time and at a temperature sufficient to form a gel or slurry; and

adding volatile silicone fluid to said gel or slurry; and thereafter

mixing said gel or slurry for a period of time and at a temperature sufficient to form a hybrid silicone powder

matrix, wherein said hydrophobic ingredient and said silicone fluid are entrapped within said powder matrix.

26. The method of claim 25, wherein said hybrid  
5 silicone powder is a crosspolymer selected from the group consisting of silicone, dimethicone, cyclomethicone, vinyl dimethicone, organomodified silicone, organomodified dimethicone, and any combinations thereof.

10 27. The method of claim 25, wherein said hybrid silicone powder is a vinyl dimethicone/methicone silsesquioxane crosspolymer.

15 28. The method of claim 25, wherein said volatile silicone fluid is selected from the group consisting of linear and cyclic silicones having 3 to 8 silicone molecules.

20 29. The method of claim 25, wherein said hydrophobic active ingredient is selected from the group consisting of an insect repellent, sunscreen, retinol, retinoic acid, retinyl palmitate, oil soluble retinol derivative, ascorbyl palmitate, oil soluble ascorbic acid derivative, salicylic acid, derivative of salicylic acid, fragrance, phytol,

essential oil, perilla oil, tamarind oil, and any combinations thereof.

30. The method of claim 25, wherein said hydrophobic  
5 active ingredient is present in an amount about 0.01 wt% to about 90% of the total weight of the composition.

31. The method of claim 25, wherein said hydrophobic  
10 active ingredient is present in an amount about 0.05 wt% to about 60 wt% of the total weight of the composition.

32. The method of claim 25, wherein said hydrophobic  
15 active ingredient is present in an amount about 0.05 wt% to about 45 wt% of the total weight of the composition.

33. The method of claim 25, wherein said hybrid  
silicone powder matrix is present in an amount about 0.1  
wt% to about 99 wt% of the total weight of the composition.

20 34. The method of claim 25, wherein said hybrid silicone powder matrix is present in an amount about 10 wt% to about 50 wt% of the total weight of the composition.

35. The method of claim 25, wherein said volatile



silicone fluid is present in an amount about 5 wt% to about 80 wt% of the total weight of the composition.

36. The method of claim 21, wherein said hydrophobic  
5 active ingredient is one or more insect repellent actives  
selected from the group consisting of oil of citronella,  
N,N diethyl-m-toluamide, ethyl butylacetylaminopropionate,  
hydroxy-ethyl isobutyl piperidine carboxylate, dimethyl  
phthalate, 2-ethyl-1,3 hexanediol, neem oil, soybean oil,  
10 lemon grass oil, geranium/geraniol oil, p-methane-3,8-diol,  
and any combinations thereof.

37. A hybrid silicone powder matrix comprising a  
15 hybrid silicone powder and a volatile silicone.

38. The matrix of claim 37, further comprising a  
cosmetically acceptable vehicle.

20 39. The matrix of claim 37, wherein said hybrid  
silicone powder comprises silicone rubber powder particles  
coated with silicone resin powder.

40. The matrix of claim 37, wherein said hybrid  
silicone powder is a crosspolymer selected from the group  
consisting of silicone, dimethicone, cyclomethicone, vinyl  
dimethicone, organomodified silicone, organomodified  
5 dimethicone, and any combinations thereof.

41. The matrix of claim 37, wherein said hybrid  
silicone powder is a vinyl dimethicone/methicone  
silsesquioxane crosspolymer.

42. The matrix of claim 37, wherein said volatile  
silicone is selected from the group consisting of linear  
and cyclic silicones having 3 to 8 silicone molecules.

43. The matrix of claim 42, wherein said volatile  
silicone is a cyclomethicone.

44. The matrix of claim 37, further comprising a  
hydrophobic active ingredient.

45. The matrix of claim 44, wherein said hydrophobic  
active ingredient is entrapped in the matrix.

46. The matrix of claim 44, wherein is selected from the group consisting of an insect repellent, sunscreen, retinol, retinoic acid, retinyl palmitate, oil soluble retinol derivative, ascorbyl palmitate, oil soluble  
5 ascorbic acid derivative, salicylic acid, derivative of salicylic acid, fragrance, phytol, essential oil, perilla oil, tamarind oil, and any combinations thereof.

47. The matrix of claim 44, wherein said hydrophobic  
10 active ingredient is one or more insect repellent actives selected from the group consisting of oil of citronella, N,N diethyl-m-toluamide, ethyl butylacetylaminopropionate, hydroxy-ethyl isobutyl piperidine carboxylate, dimethyl phthalate, 2-ethyl-1,3 hexanediol, neem oil, soybean oil,  
15 lemon grass oil, geranium/geraniol oil, p-methane-3,8-diol, and any combinations thereof.

48. A method of applying a liquid ingredient to skin in powder form comprising topically applying to skin the  
20 composition of claim 1, wherein the hydrophobic active ingredient and the volatile silicone are liquid.

49. A topical cosmetic composition comprising an effective amount of a hydrophobic active ingredient, an

entrapment agent for the active ingredient, and a  
cosmetically acceptable vehicle, wherein the entrapment  
agent comprises a matrix of silicone rubber powder  
particles and silicone resin powder, and wherein the  
5 composition is in powder form upon topical application.

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